

REMARKS

Claims 1-18 remain pending in the application. Claims 1-5, 8, and 12 have been amended. Claim 14 has been canceled. Claim 19 has been added.

Claims 1-13 stand rejected under 35 U.S.C. §102(b) as being anticipated by Longway et al. (U.S.P. No. 5,563,834), (hereinafter referred to Longway).

In response to the above rejection, claims 1 and 2 have been amended by merging claim 2 into claim 1. Additionally, the limitation that the write bitlines in the two arrays are activated according to the data pattern has now been incorporated in the now amended claim 2. This limitation has been incorporated to further differentiate what Applicants deem to be their invention from Longway, since Longway teaches that the noise canceling is achieved by activating one word line in the same array.

Further, Longway does not teach "a means for driving a write bitline in the first block and a write bitline in the second block in a direction to create a common mode noise in a read bitline in the first block and a read bitline in the second block", as now recited in amended claim 1.

Claim 4 has been amended to include a limitation describing the two layer configuration of the read bitline (RBL) and one layer configuration of the write bitline (WBL), and one layer configuration of WBL. Prior art shows the noise canceling technique by using a single layer configuration for both RBL and WBL.

Applicants further submit that Longway does not teach activating the WBLs in two different arrays to cancel the RBL noise without bitline (BL) twisting. Figures 10, 24-26 of Longway's patent, show the configuration of noise cancellation by twisting BL within a same array. As shown in Figure 6 of the present application, WBL in array 60A, and array 60B are driven as for the same direction to allow creating a common noise in RBLs in two arrays without recurring to BL twisting. Applicants further submit that the two arrays cancel the noise for simultaneous read and write, without recurring to BL twisting. This feature is believed to be a unique and novel configuration.

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The prior art does not teach how to utilize two different layers for the RBL and one layer for the WBL to cancel noise in the event of a simultaneous read and write. Figs 10, 24-26, show the configuration of noise cancellation by horizontally twisting BL in a same layer. As shown in Fig. 7, Applicants utilize two layers for the RBL to achieve a common noise from the adjacent full length WBL to each half-length RBLs. Claim 4 as amended includes these limitations to emphasize the stated configuration.


In view of the aforementioned amendments, Applicants believe that they have overcome the rejection of claims 1-13 under 35 U.S.C. § 102 b) and respectfully request that the Examiner withdraw the rejection of the stated claims based thereon.

Claims 14-18 stand objected to but would be allowed if rewritten in independent form. Claim 12 has now been amended to include the limitation recited in claim 14. Accordingly, Applicants believe that claims 12-18 as amended are allowable.

In view of the foregoing arguments and amendments, Applicants believe that they have overcome all the rejections and objections to the application, and respectfully request that all the amendments be entered and that the Examiner pass all the pending claims to issue.

Should the Examiner have any suggestions pertaining to the allowance of the application, the Examiner is encouraged to contact Applicants' undersigned representative.

Respectfully submitted,
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